

Appl. No. 10/725,776
Docket No. 2102475-991290
Response to Office Action of April 5, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A semiconductor memory device comprising:

a memory cell array having a plurality of memory cells arranged in rows and columns, and bit lines and word lines connected to the memory cells; and

a command buffer circuit, which receives at least an active signal to activate one of the rows, and a clock signal, the command buffer circuit generating an internal precharge signal to precharge the bit lines based on the active signal.
2. (original) The device according to claim 1, the command buffer circuit comprising:

a latch circuit to which the clock signal and the active signal are supplied, the latch circuit latching the active signal in response to the clock signal;

a logic circuit to which the active signal latched by the latch circuit and the clock signal are supplied, the logic circuit generating the internal precharge signal; and

a delay circuit which delays the internal precharge signal supplied from the logic circuit, and generates an internal active signal.
3. (original) The device according to claim 1, further comprising:

a precharge circuit connected to the bit lines of the memory cell array, the precharge circuit precharging the bit lines in response to the precharge signal.
4. (original) The device according to claim 1, wherein the memory cell array constitutes a DRAM.
5. (original) The device according to claim 1, further comprising:

a detection circuit which monitors a potential of a word line, and detects a precharge

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period of said word line; and

a logic circuit which activates a word line of the word lines, in response to the active signal and a detection output signal of the detection circuit.

6. (original) A semiconductor memory device comprising:

a memory cell array having a plurality of memory cells arranged in rows and columns, and bit lines and word lines connected to the memory cells;

a command buffer circuit, which receives at least an active signal to activate one of the rows, and a clock signal, the command buffer circuit generating an internal active signal based on the active signal; and

a control circuit which generates an internal precharge signal to precharge the bit lines in response to the active signal outputted from the command buffer circuit, the control circuit controls a time in which one of the word lines is kept selected.

7. (original) The device according to claim 6, the control circuit comprising:

a counter which counts the clock signal in response to the active signal, the counter outputs a signal when it counts the clock signal to a preset value;

a flip-flop circuit which is reset in response to the active signal, and set in response to the signal outputted from the counter; and

a generating circuit which generates the internal precharge signal when the flip-flop circuit is set.

8 (original) The device according to claim 6, the command buffer circuit comprising:

a latch circuit to which the clock signal and the active signal are supplied, the latch circuit latching the active signal in response to the clock signal;

a logic circuit to which the active signal latched by the latch circuit and the clock signal are supplied, the logic circuit generating the internal precharge signal; and

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a delay circuit which delays the internal precharge signal supplied from the logic circuit, and generates an internal active signal.

9. (original) The device according to claim 6, further comprising:

a precharge circuit connected to the bit lines of the memory cell array, the precharge circuit precharging the bit lines in response to the precharge signal.

10. (original) The device according to claim 6, wherein the memory cell array constitutes a DRAM.

11. (original) The device according to claim 6, further comprising:

a detection circuit which monitors a potential of a word line, and detects a precharge period of said word line; and

a logic circuit which activates a word line of the word lines, in response to the active signal and a detection output signal of the detection circuit.